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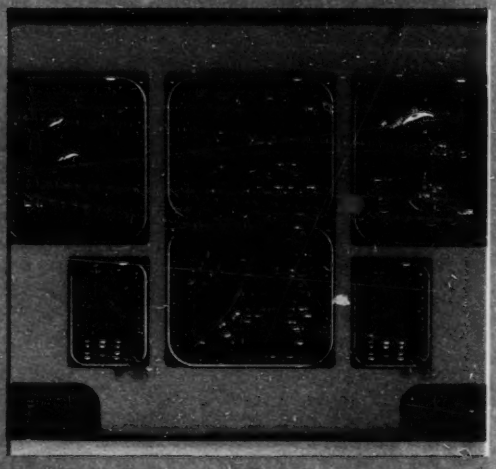
DECEMBER 1988 $3.00

Business and commercial Aviation

Operator Survey: BAe 800

The Fortune 500 Fleet



Collins Concept 4

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CLEARANCE DELIVERY

B/CA participates in the aviation community in many ways: as a communications vehicle and forum for ideas, as a user of business aircraft, and as a party to the issues and challenges that confront all of us who are involved with general aviation. B/CA exists as a magazine to satisfy the informational needs of the serious aviator, and its staff is dedicated to help the aviation community grow in a healthy and productive manner.

It is in this latter area—which ranges from B/CA's involvement in the FAA's safety activities through the General Aviation Safety Panel (GASP), to the support of Editor Olcott's work on NASA's Aeronautics Advisory Committee and the B/CA staff's involvement with NBAA educational activities—that the depth of the magazine and the capabilities of its entire staff are most noticeable.

One staff member who plays a vital yet low-profile role in B/CA's community activities is Kathleen Hull, assistant to the editor. Many participants in the General Aviation Safety Panel activities chaired by Jack Olcott know of Kathy as the person who checks schedules and arranges nonconflicting dates for GASP meetings, and then copies the Panel's notes for everyone. Without her skillful organization, the

Business Aviation and the *Fortune* 500_____**74**
Fortune 500 companies don't need the usual push to produce; they are naturally ambitious. But of the 500, those that operate aircraft certainly have an edge.

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With terrain, obstructions and other airplanes so close by, airports can be hazardous areas.

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Channeling the depression that can come around the holidays into positive energy is an important part of maintaining one's mental health.

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Safety Panel would have its share of institutional headaches.

In addition to preventing the editors from making commitments to be in two places at the same time, Kathy handles editorial correspondence and maintains the flow of accounting information that is required to process the business activities of the editorial department.

Kathy is one of the reasons why B/CA is able to contribute to the general aviation community.

THE COVER
Staff Editor Alan Staats photographed BAe's 800. The *Fortune* art was done by B/CA. Collins supplied the photo of Concept 4.

Business and commercial Aviation

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Business Aviation and the *Fortune* 500

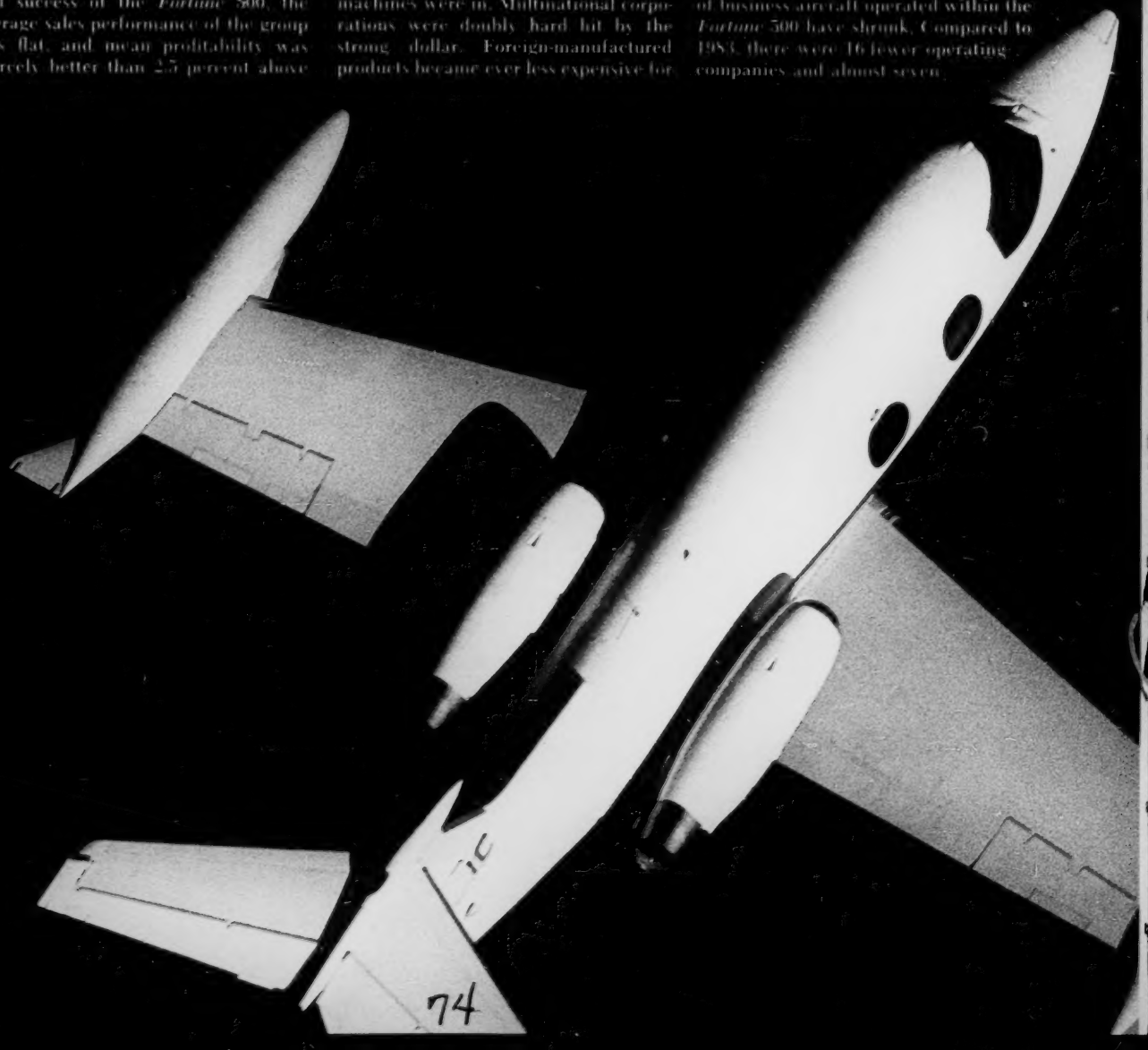
While the financial picture for *Fortune* 500 corporations was not spectacular in 1984, aircraft operators managed to outperform nonoperators in all areas.

by Fred George

Surprisingly, there is nothing more certain than change within corporations arriving at, departing from and swapping positions within *Fortune* magazine's annual sales ranking of the 500 largest U.S. industrial corporations. Contrary to the popular misconception about the unwavering economic growth and success of the *Fortune* 500, the average sales performance of the group was flat, and mean profitability was scarcely better than 2.5 percent above 1981. Notably, both were down when adjusted for inflation.

The unprecedented strength of the U.S. dollar exacerbated import pressures in spite of Industrial America's best efforts towards tough-and-lean cost cutting and productivity improvements. Perks were out; numerically controlled machines were in. Multinational corporations were doubly hard hit by the strong dollar. Foreign-manufactured products became ever less expensive for the American consumer, and profits from foreign subsidiaries, when weak foreign currencies were translated into strong dollar earnings, were lower.

It should come as no shock to our readers that for the second consecutive year, both the number of aircraft-operating companies and the total number of business aircraft operated within the *Fortune* 500 have shrunk. Compared to 1983, there were 16 fewer operating companies and almost seven



percent fewer aircraft in 1984.

But statistical averages are only a small measure of the operating dynamics of the *Fortune* 500. Tough times appear to bring out the best in the performance of individual companies. While 1983 was a year of consolidation, mergers, asset sales and write-downs, those moves helped prepare some companies for a better 1984. It is in this light, that the specific economic performance of aircraft-operating companies may be more accurately compared to that of the nonoperators among the *Fortune* 500.

A glance at the accompanying charts reveals that the financial performance of the aircraft operators exceeds that of nonoperators in all areas. But of greater significance, the specific performance increases of aircraft operators in terms of net income as a percent of sales, net income as a percent of stockholders' equity, and income per employe indicate higher productivity—and in most cases, higher productivity increases—than that of the nonoperators.

While the use of business aircraft by no means assures a company of success, these performance increases suggest a strong and continuing correlation between industrial companies that operate business aircraft and comparatively greater productivity in certain key areas.

Quite apparently, the sales performance of most companies is benefiting from continued economic recovery, but profitability is another matter altogether. If one credits first-rate management with the tough-and-lean productivity decisions enacted during the past two years and which are now causing relatively greater profitability of certain companies, and if the use of business aircraft represents one of the ways employe productivity is increased, it is not unreasonable to assume that those companies that operate business aircraft should perform better than those that do not.

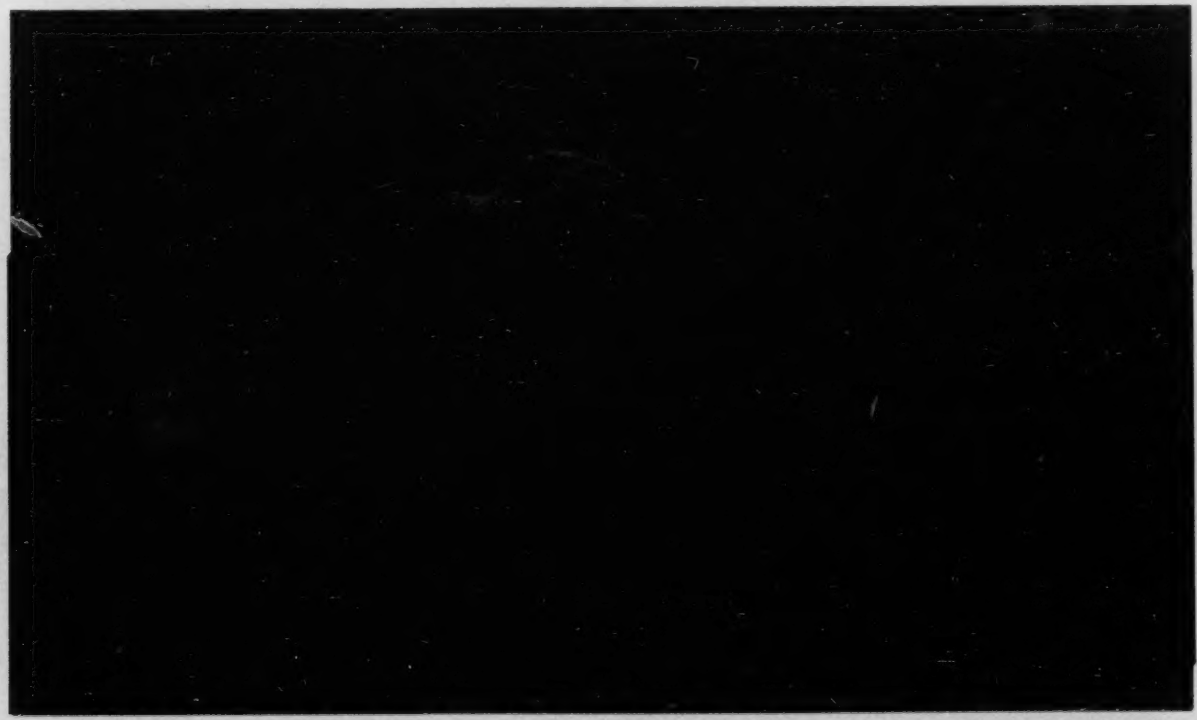
	Nonoperators	Operators
Sales per Employe	$99,264	$130,397
Change over 1983	+6.2%	+5.3%
Net Income as a Percent of Sales	4.0%	5.0%
Change over 1983	+5.0%	+18.0%
Net Income per Employe	$3,951	$6,536
Change over 1983	+11.2%	+22.3%
Net Income as a Percent of Stockholders' Equity	12.0%	13.7%
Change over 1983	+9.2%	+20.4%

Among the star performers were auto makers, appliance manufacturers, food processing companies, publishers, and tire makers. Not only did these industries prosper in 1984, the aircraft operators among them did even better than their nonoperating counterparts.

For example, aircraft operators among the auto makers achieved more than eight times the net income as a percent of sales, seven times more net income per employe and four times more net income as a percent of stockholders' equity compared to nonoperators. General Motors increased its fleet of business aircraft by 33 percent to 16 in the last year; Ford operated eight aircraft in 1984; and Chrysler operated three aircraft, two more than last year.

The electrical appliance makers showed similar productivity gains since our last report in December 1984. In the four performance categories listed above, the aircraft operators scored substantially higher than the nonoperators in 1984. And in all four areas, the performance improvement of the aircraft operators from 1983 to 1984 was equal to or greater than that of the nonoperators. *Fortune* magazine identifies Magic Chef, which is an operator of two business aircraft, as being one of the prime leaders in the appliance group.

In the foods group, Tyson Foods, Consolidated Foods, H.J. Heinz, Kellogg, Beatrice and other aircraft operators



Companies	Employes	Net Sales	Assets	Net Income	Stockholders' Equity	Sales Per Employe	Net Income as a % of Sales	Net Income Per Employe	Net Income as a % of Stockholders' Equity

achieved overall higher net income as a percent of sales and higher net income per employe than nonoperators. The productivity increases compared with 1983 are even more impressive: 15.8 and 23.4 percent for operators, versus 13.0 and 6.0 percent for nonoperators in the former two categories, respectively.

In fact, all of the food-producing and food-processing companies within the *Fortune* 500 operate business aircraft, and Beatrice—which has experienced explosive growth in the last year, much of it through acquisitions—now operates more than twice as many aircraft as it did just 12 months ago.

Publishers and printers also did well in 1984. While aircraft operators achieved higher sales per employe than the nonoperators, the reverse was true in terms of performance change from 1983 to 1984. But, aircraft operators beat nonoperators in the other key areas of net income as a percent of sales, net income per employe and net income as a percent of stockholders' equity. The operators also registered higher increases from 1983 to 1984 in these three areas.

The U.S. tire makers bounced back in 1984 to much improved profitability, largely because these companies lowered prices to compete better with imports, cut much of the fat out of their production facilities and received a windfall of lower oil prices, which alone accounted for more than three quarters of the cost of manufacturing. In the rubber products category, four of the top five performers—Goodyear, Goodrich, Firestone and GenCorp—operate business aircraft.

The Fortune 500 Fleet

Compared to last year, there are about 4.4 percent fewer *Fortune* 500 companies operating business aircraft and 121 fewer aircraft in the *Fortune* 500 total fleet. The average number of aircraft owned per company has declined slightly and remains below five. However, the average aircraft value has increased by almost $200,000.

About one quarter (84) of the operators fly but one aircraft. The largest fleet operated by one corporation (Chevron) is 58 aircraft. The average fleet size of the five largest corporate operators is 36, down from 37.6 and 39.8 as reported in our December 1984 and 1983 issues, respectively. The five largest operators are Chevron (58), Mobil (33), Rockwell-International (33), Tenneco (29) and Dupont (27).

The *Fortune* 500's fleet ranges from Bonanzas to Boeings. In contrast to last year's report, more *Fortune* 500 companies operate Cessna aircraft than any other manufacturer, with Beechcraft coming in a close second. There are also more Cessna aircraft operated by *Fortune* 500 companies than any other brand. The top

Figure 2 **Sales Per Employe**

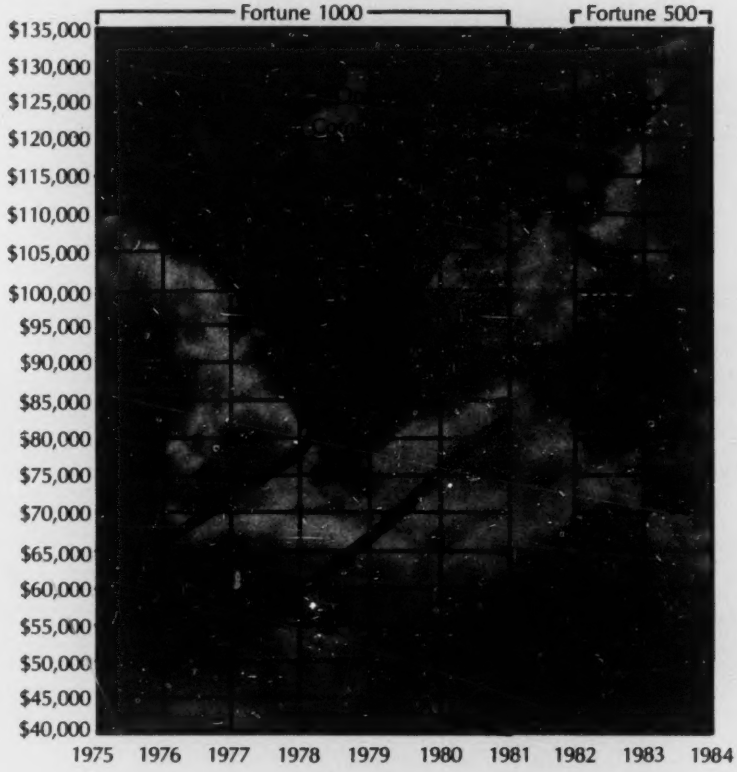
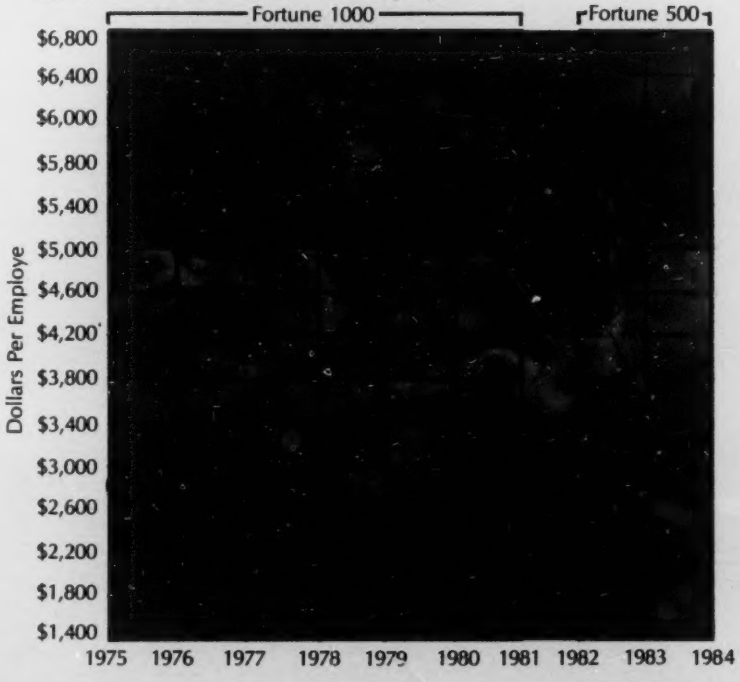


Figure 3 **Net Income Per Employe**



eight of the 47 aircraft manufacturers represented in the fleet lay claim to have produced three quarters (1,274 units) of all the aircraft: Cessna (270), Beechcraft (231), Gulfstream (216), Avions Marcel-Dassault (158), Gates Learjet (121), Bell Helicopter Textron (104), Rockwell (93) and British Aerospace (81).

The five most popular business jets with the *Fortune* 500 (in order) are Falcons, Gulfstreams, Citations, Learjets and Sabreliners, with the average year of manufacture being 1977.

The Beechcraft King Air continues to be by far the most popular turboprop of the *Fortune* 500, as Beech has sold more King Airs within the group and to more companies than all other turboprop manufacturers combined. The average age of a *Fortune* 500 turboprop is 11 years.

The recip category is dominated by the big three U.S. general aviation makers: Cessna, Beech and Piper.

Within the 26 industrial group classifications of the *Fortune* 500, the largest increases in the number of aircraft operated by category were reported in mining/crude oil production, chemicals, measuring/scientific/photo equipment, and motor vehicle groups.

Although the largest number of aircraft (289) continues to be operated by the petroleum refiners, this group also experienced the largest decline (36) in aircraft operated in 1984 compared to 1983.

Other industries that suffered sizable losses to their fleets were the apparel, metal manufacturing, metal products, shipbuilding / railroad / transportation equipment, and, unexpectedly, the aerospace group. Much of the decline in the number of aircraft operated by these six industrial groups may be attributed to the economic woes created by a very strong dollar coupled to the ever worsening impact of foreign competition in domestic and overseas markets.

But, ours is an economy in a tumultuous transition from a manufacturing to a service orientation. Consequently, the volume of business aircraft operation within the *Fortune* 500 *industrials* should be placed in proper perspective. Business aircraft activity within an entirely different group of corporations has been completely excluded. Companies such as American Express, Manufacturers Hanover and K Mart are conspicuously missing. The *Fortune* 500 *service* companies—including commercial banking, diversified financial services, life insurance companies, retailers and public utilities—will be the focus of a later report. □

Fortune 500 Fleet Summary

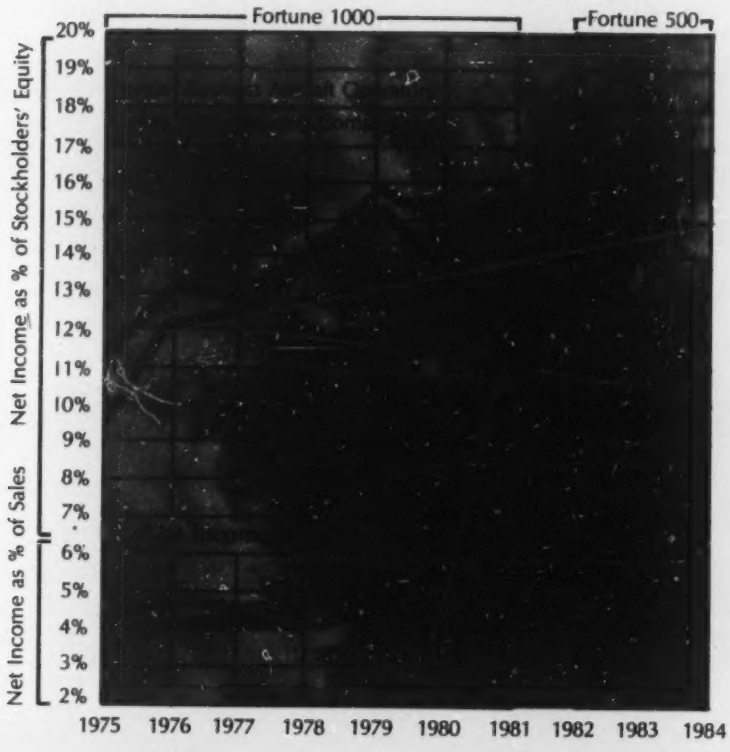
Airplanes	Piston	Turboprop/ Turboshaft	Turbojet	Total
Multiengine	0	0	103	103
Single engine	123	5	3	131
Twin engine	120	347	791	1,258
Subtotal	243	352	897	1,492
Helicopters				
Single engine	7	98	0	105
Twin engine	0	80	0	80
Subtotal	7	178	0	185
Total	**250**	**530**	**897**	**1,677**

Comparative Fleet Size

Number of Aircraft	Number of Companies
1	84
2	75
3	45
4	30
5	17
6	17
7	16
8	12
9	6
10	10
11	8
12	1
13	1
14	7
15	2
16	3
17	1
18	1
19	1
20	1
21	1
24	1
25	1
26	1
27	1
29	1
33	2
58	1
1,677	**347**

Groups	Companies		Aircraft Operated
	Nonoperators	Operators	
Mining, Crude Oil Production	1	11	55
Food	20	34	104
Tobacco	1	3	20
Textiles, Vinyl Flooring	3	8	15
Apparel	4	8	27
Furniture	1	1	2
Paper, Fiber & Wood Products	9	24	104
Publishing, Printing	6	12	40
Chemicals	18	27	142
Petroleum Refining	4	25	289
Rubber, Plastic Products	4	8	27
Glass, Concrete, Abrasives, Gypsum	3	14	41
Metal Manufacturing	9	19	51
Metal Products	7	15	33
Electronic Appliances	18	32	178
Shipbldg., RR & Transport Equip.	2	4	13
Measuring, Scientific, Photo Equip.	7	9	44
Motor Vehicles	3	12	62
Aerospace	2	15	178
Pharmaceuticals	5	14	43
Soaps, Cosmetics	3	6	18
Office Equipment (Computers)	13	8	44
Industrial & Farm Equipment	4	28	108
Musical Instr., Toys, Sport Goods	3	3	8
Beverages	3	7	31
Average or Total	153	347	1,677

Figure 4 Net Income as Percent of Stockholders' Equity



Sales Per Employe		Net Income as a Percent of Sales		Net Income Per Employe		Net Income as a Percent of Stockholders' Equity	
Nonoperators	Operators	Nonoperators	Operators	Nonoperators	Operators	Nonoperators	Operators
160,093	278,325	5.5	5.8	8,801	16,097	20.4	12.4
125,000	114,512	2.3	3.8	2,909	4,348	12.7	16.7
58,906	132,849	9.3	9.7	5,451	12,895	19.1	24.7
63,734	65,171	1.6	3.1	1,047	2,014	5.4	9.1
64,961	56,043	2.3	5.0	1,467	2,822	7.7	14.6
58,407	64,951	2.5	4.8	1,132	3,100	8.0	19.3
109,087	130,507	6.0	3.4	6,548	4,432	14.9	8.3
88,447	97,454	8.6	8.7	7,607	8,464	18.5	18.8
164,733	148,168	4.4	4.2	7,178	5,776	13.4	10.5
253,669	430,122	0.8	4.1	2,032	17,714	5.5	11.5
100,397	84,266	3.2	3.0	3,247	2,557	11.2	9.8
90,575	97,182	2.6	4.9	2,344	4,799	5.5	12.1
137,704	128,104	-0.9	-0.7	-1,272	-916	-1.9	-2.2
76,299	78,350	5.4	4.4	4,131	4,347	13.5	12.3
65,710	69,555	4.7	5.4	3,102	4,854	11.7	13.5
102,650	69,909	4.2	2.8	4,311	1,983	24.6	11.4
73,579	80,329	3.8	7.0	2,795	5,632	7.6	13.4
130,09	116,362	0.7	6.2	945	7,158	5.7	24.6
119,577	91,514	5.2	4.2	6,225	3,880	16.6	15.8
100,826	91,494	6.1	10.9	6,100	9,946	13.1	18.7
193,294	128,851	3.8	5.5	7,304	7,145	13.7	15.3
90,321	90,950	4.7	11.0	4,237	10,014	12.3	19.7
81,943	86,308	5.3	2.5	4,363	2,165	21.5	6.1
77,900	68,785	1.8	3.4	1,441	2,340	10.3	9.9
105,646	103,665	9.1	6.0	9,593	6,192	21.1	15.1
99,264	138,397	4.0	5.0	3,951	6,536	12.0	13.7